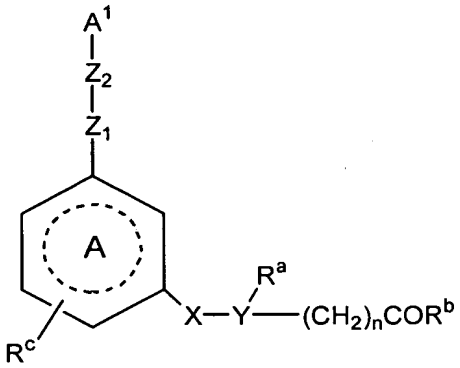
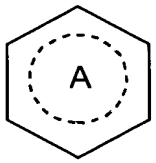
What is claimed is:

1. A compound of the Formula:

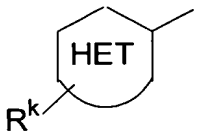


or a pharmaceutically acceptable salt thereof, wherein



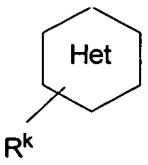
is a 4-8 membered monocyclic or a 7-11 membered bicyclic ring, optionally containing 1 to 4 heteroatoms, selected from the group consisting of O, N or S; optionally saturated or unsaturated, optionally substituted with one or more substituent selected from the group consisting of alkyl, haloalkyl, aryl, heteroaryl, halogen, alkoxyalkyl, aminoalkyl, hydroxy, nitro, alkoxy, hydroxyalkyl, thioalkyl, amino, alkylamino, arylamino, alkylsulfonamide, acyl, acylamino, sulfone, sulfonamide, allyl, alkenyl, methylenedioxy, ethylenedioxy, alkynyl, carboxamide, cyano, and -$(CH_2)_n$ COR wherein n is 0-2 and R is hydroxy, alkoxy, alkyl or amino;

A^1 is a 5-9 membered monocyclic or 7-14 membered polycyclic heterocycle of the formula

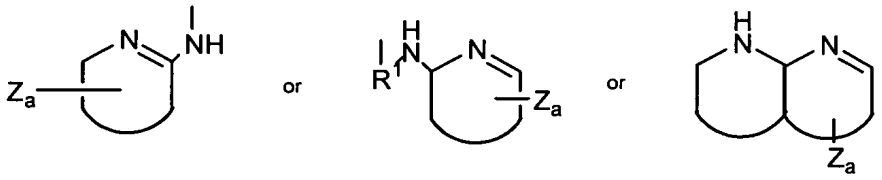


containing at least one nitrogen atom and optionally 1 to 4 heteroatoms or groups selected from O, N, S, SO_2 or CO; optionally saturated or unsaturated;

optionally substituted by one or more R^k selected from the group consisting of hydroxy, alkyl, alkoxy, alkoxyalkyl, thioalkyl, haloalkyl, cyano, amino, alkylamino, halogen, acylamino, sulfonamide and -COR wherein R is hydroxy, alkoxy, alkyl or amino;



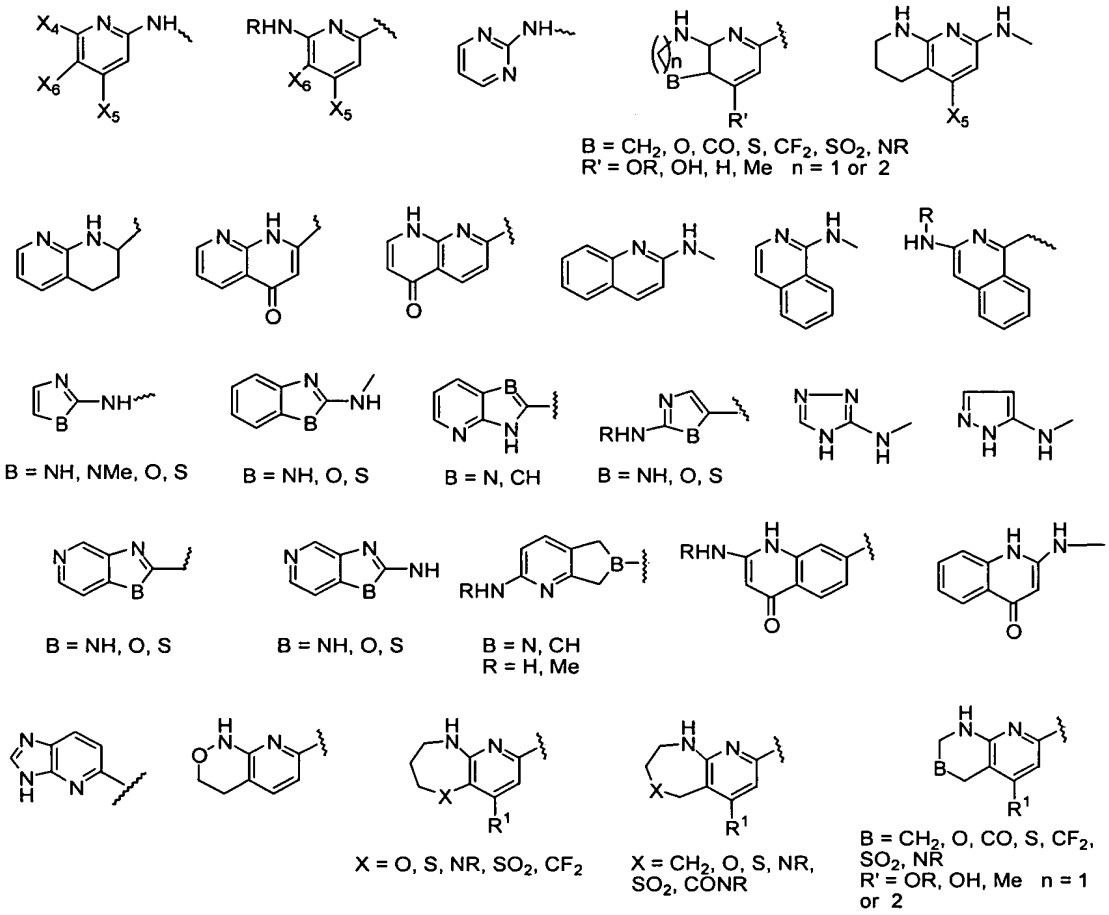
include the following heterocyclic ring systems containing at least one nitrogen atom:



B2 B3 B4

wherein Z_a is H, alkyl, alkoxy, hydroxy, amine, alkylamine, dialkylamine, carboxyl, alkoxycarbonyl, hydroxyalkyl, halogen or haloalkyl and R^1 is H, alkyl, alkoxyalkyl, acyl, haloalkyl or alkoxycarbonyl. More specifically some examples of embodiments include pyridylamino, imidazolylamino, morpholinopyridine, tetrahydronaphthyridine, oxazolylamino, thiazolylamino, pyrimidinylamino, quinoline, isoquinoline, tetrahydroquinoline, imidazopyridine, benzimidazole, pyridone or quinolone.

The following heteroaryls include the ring systems described above.

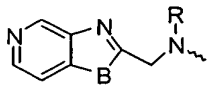


For the pyridyl derived heterocycle, the substituents X_4 and X_5 are selected from the group consisting of H, alkyl, branched alkyl, alkylamino, alkoxyalkylamino, haloalkyl, thioalkyl, halogen, amino, alkoxy, aryloxy, alkoxyalkyl, hydroxy, cyano or acylamino groups. In another embodiment of the invention, the substituents X_4 and X_5 can be methyl, methoxy, amine, methylamine, trifluoromethyl, dimethylamine, hydroxy, chloro, bromo, fluoro and cyano. X_6 may preferentially be H, alkyl, hydroxy, halogen, alkoxy and haloalkyl. Alternately, the pyridyl ring can be fused with a 4 - 8 membered ring, optionally saturated or unsaturated. Some examples of these ring systems include tetrahydronaphthyridine, quinoline, tetrahydroquinoline, azaquinoline, morpholinopyridine, imidazo-pyridine and the like. The monocyclic ring systems such as imidazole, thiazole, oxazole, pyrazole, and the like, may contain an amino or alkylamino substituent at any position within the ring.

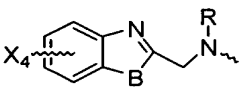
In another embodiment of the present invention, when Z_1 of Formula I is CO or SO_2, the linkage A^1-Z_2 of Formula I includes the heterocycle derived

ring systems such as: pyridine, imidazole, thiazole, oxazole, benzimidazole, imidazopyridine and the like.

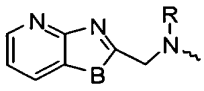
Other heterocycles for A^1-Z_2 of the present invention include



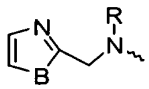
B = NH, O, S
R = H, Me



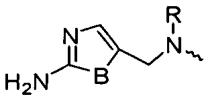
B = NH, O, S
R = H, Me



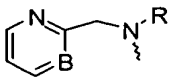
B = NH, O, S
R = H, Me



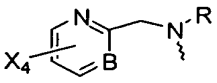
B = NH, O, S
R = H, Me



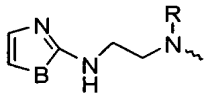
B = NH, O, S
R = H, Me



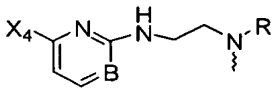
B = N, CH
R = H, Me



B = N, CH
R = H, Me



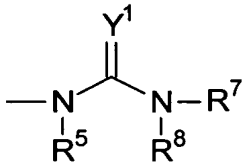
B = NH, O, S
R = H, Me



B = N, CH
R = H, Me

wherein X_4 is as defined above.

or A^1 is



wherein Y^1 is selected from the group consisting of N-R^2, O, and S;

R^2 is selected from the group consisting of H; alkyl; aryl; hydroxy; alkoxy; cyano; alkenyl; alkynyl; amido; alkylcarbonyl; arylcarbonyl; alkoxycarbonyl; aryloxycarbonyl; haloalkylcarbonyl; haloalkoxycarbonyl; alkylthiocarbonyl; arylthiocarbonyl; acyloxymethoxycarbonyl;

R^2 taken together with R^7 forms a 4-12 membered dinitrogen containing heterocycle optionally substituted with one or more substituent selected from the group consisting of lower alkyl, thioalkyl, alkylamino, hydroxy, keto, alkoxy, halo, phenyl, amino, carboxyl or carboxyl ester, and fused phenyl;

or R^2 taken together with R^7 forms a 5-9 membered heteroaromatic ring optionally substituted with one or more substituent selected from lower alkyl, phenyl, alkoxy and hydroxy;

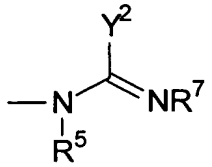
or R^2 taken together with R^7 forms a 5 membered heteroaromatic ring fused with a aryl or heteroaryl ring;

R^7 (when not taken together with R^2) and R^8 are independently selected from the group consisting of H; alkyl; alkenyl; alkynyl; aralkyl; amino; alkylamino; hydroxy; alkoxy; arylamino; amido, alkylcarbonyl, arylcarbonyl; alkoxycarbonyl; aryloxy; aryloxycarbonyl; haloalkylcarbonyl; haloalkoxycarbonyl; alkylthiocarbonyl; arylthiocarbonyl; acyloxymethoxycarbonyl; cycloalkyl; bicycloalkyl; aryl; acyl; benzoyl;

or NR^7 and R^8 taken together form a 4-12 membered mononitrogen containing monocyclic or bicyclic ring optionally substituted with one or more substituent selected from lower alkyl, carboxyl derivatives, aryl or hydroxy and wherein said ring optionally contains a heteroatom selected from the group consisting of O, N and S;

R^5 is selected from the group consisting of H and alkyl;

or

A^1 is 

wherein Y^2 is selected from the group consisting of alkyl; cycloalkyl; bicycloalkyl; aryl; monocyclic heterocycles;

Z_1 is selected from the group consisting of CH_2, CH_2O, O, NH, CO, S, SO, CH(OH) and SO_2;

Z_2 is a 1-5 carbon linker optionally containing one or more heteroatom selected from the group consisting of O, S and N;
alternatively Z_1 - Z_2 may further contain a carboxamide, sulfone, sulfonamide, alkenyl, alkynyl, or acyl group;

wherein the carbon and nitrogen atoms of Z_1 - Z_2 are optionally substituted by alkyl, alkoxy, thioalkyl, alkylsulfone, aryl, alkoxyalkyl, alkylamino, heteroaryl, alkenyl, alkynyl, carboxyalkyl, halogen, haloalky or acylamino;

n is an integer 0, 1 or 2;

R^c is selected from the group consisting of hydrogen; alkyl; halogen, hydroxy, nitro, alkoxy, amino, haloalkyl, aryl, heteroaryl, alkoxyalkyl, aminoalkyl, hydroxyalkyl, thioalkyl, alkylamino, arylamino, alkylsulfonylamino, acyl, acylamino, sulfonyl, sulfonamide, allyl, alkenyl, methylenedioxy, ethylenedioxy, alkynyl, alkynylalkyl, carboxy, alkoxycarbonyl, carboxamido, cyano, and $-(CH_2)_nCOR$ wherein n is 0-2 and R is selected from hydroxy, alkoxy, alkyl and amino;

X is selected from the group consisting of $-CHR^e-$, $-NHR^f-$, -O-, -S-, $-SO_2-$, and CO wherein R^e is H, lower alkyl, alkoxy, cycloalkyl, alkoxyalkyl, hydroxy, alkynyl, alkenyl, haloalkyl, thioalkyl or aryl; wherein when R^e is hydroxy the hydroxy can optionally form a lactone with the carboxylic acid function of the chain; wherein R^f is selected from the group consisting of H, alkyl, aryl, benzyl and haloalkyl;

Y is selected from the group consisting of - CR^g- or -N^g- wherein R^g is selected from the group consisting of H, alkyl, haloalkyl, alkoxyalkyl, alkynyl, aryl, heteroaryl, aralkyl, hydroxy, alkoxy, and carboxyalkyl;

optionally the group X-Y can contain a moiety selected from the group consisting of acyl, alkyl, sulfonyl, amino, ether, thioether, carboxamido, sulfonamido and olefin;

R^b is X_2 - R^h wherein X_2 is selected from the group consisting of O, S and NR^j wherein R^h and R^j are independently selected from the group consisting of H, alkyl, aryl, aralkyl, acyl and alkoxyalkyl; and

R^a is selected from the group consisting of hydrogen, alkyl, alkenyl, alkoxyalkyl, hydroxyalkyl, alkynyl, alkynylalkyl, alkenylalkyl, haloalkyl, aryl, heteroaryl, aralkyl, heteroaralkyl, cycloalkyl, carboxyl, amino, alkylamine, alkoxycarbonyl, carboxamido, hydroxy, cyano, alkoxy, thioalkyl, acylamino, sulfonyl amino, alkylsulfonyl, and -$(CH_2)_n$ COR^b wherein n is 0 - 2 and R^b is as defined above.

2. A compound according to Claim 1 selected from the group consisting of

3-[[3-(2-pyridinylamino)propoxy]phenyl]propanoic acid;
3-[[4-(2-pyridinylamino)butoxy]phenyl]propanoic acid;
3-[[5-(2-pyridinylamino)pentoxy]phenyl]propanoic acid;
3-Phenyl-4-[3-[3-(pyridin-2-yl)amino-1-propyloxy]phenyl]butanoic acid;
3-[3-(2-pyridinylamino)propoxy]phenyl-3-methylbutanoic acid;
3-[4-(2-pyridinylamino)butoxy]phenyl-3-methylbutanoic acid;
β-[[[3-[3-(2- pyridinylamino)propoxy]phenyl]sulfonyl]amino]-benzenpropanoic acid;
β-[[[3-[4-(2-pyridinylamino)butoxy]phenyl]sulfonyl]amino]benzene propanoic acid;
3-[3-(2-pyridinyl)amino]-1-propyloxyphenylsulfonyl)-3-(3-pyridyl)aminopropanoic acid;

3-[4-(2-pyridinyl)amino]-1-butyloxyphenylsulfonyl)-3-(3-pyridyl)amino-propionic acid;

3-(4-(2-tetrahydropyrimidinyl)aminobutyloxyphenylsulfonyl)-3-(3-pyridyl)aminopropionic acid;

3-(4-(2-(5-hydroxy-tetrahydropyrimidinyl)aminobutyloxyphenyl-sulfonyl))-3-(3-pyridyl)aminopropionic acid;

3-[4-(2-pyridinyl)amino]-1-butyloxyphenylsulfonyl)-3-(3,5-dichloro-phenyl)-aminopropionic acid;

3-[4-(2-pyridinyl)amino]-1-butyloxyphenylsulfonyl)-3-(3-pyridyl)amino-propionic acid;

3-[3-(2-pyridinyl)amino]-1-butyloxyphenylsulfonyl)-3-(phenethyl)-amino-propionic acid;

β-[[[3-[3-(2-pyridinylamino)butoxy]phenyl]sulfonyl]methyl]benzene-propanoic acid;

β-[[[3-[3-(2-pyridinylamino)butoxy]phenyl]sulfonyl]methyl]-4-fluorobenzene-propanoic acid;

N-({3-[4-(pyridin-2-ylamino)butoxy]phenyl}sulfonyl)-beta-alanine;

4-methyl-3-[({3-[4-(pyridin-2-ylamino)butoxy]phenyl}sulfonyl)amino]-pentanoic acid;

3-cyclohexyl-3-[({3-[4-(pyridin-2-ylamino)butoxy]phenyl}sulfonyl)-amino]propanoic acid;

3-(4-methylphenyl)-3-[({3-[4-(pyridin-2-ylamino)butoxy]phenyl}-sulfonyl)amino]propanoic acid;

β-[[[3-[4-[(1,4,5,6-tetrahydro-2-pyrimidinyl)amino]butoxy]phenyl]-sulfonyl]-amino]benzenepropanoic acid;

3-[[[3-[4-[(2-pyridinylamino)butoxy]phenyl]sulfonyl]amino]-3-butanoic acid;

3-[[[3-[4-[(1,4,5,6-tetrahydro-2-pyrimidinyl)amino]butoxy]phenyl]-sulfonyl]-amino]butanoic acid;

(3*S*)-3-[[[3-[4-(2-pyridinylamino)butoxy]phenyl]sulfonyl]amino]-5-hexynoic acid;

β-[[[3-[[5-(2-pyridinylamino)pentyl]oxy]phenyl]sulfonyl]amino]-benzene-propanoic acid;

(β^2S)-β-[[[3-[4-(2-pyridinylamino)butoxy]phenyl]sulfonyl]amino]-2-naphthalenebutanoic acid;
(3S)-3-[({3-[4-(Pyridin-2-ylamino)butoxy]phenyl}sulfonyl)amino]pent-4-ynoic acid;
(3S)-5-Phenyl-3-[({3-[4-(pyridin-2-ylamino)butoxy]phenyl}sulfonyl)-amino]pent-4-ynoic acid;
(3S)-5-[3,5-Bis(trifluoromethyl)phenyl]-3-[({3-[4-(pyridin-2-ylamino)butoxy]-phenyl}sulfonyl)amino]pent-4-ynoic acid;
(3S)-5-(3,5-Dichlorophenyl)-3-[({3-[4-(pyridin-2-ylamino)butoxy]-phenyl}-sulfonyl)amino]pent-4-ynoic acid;
(3S)-5-[2-(Aminosulfonyl)phenyl]-3-[({3-[4-(pyridin-2-ylamino)butoxy]-phenyl}sulfonyl)amino]pent-4-ynoic acid;
1-({3-[4-(Pyridin-2-ylamino)butoxy]phenyl}sulfonyl)piperidine-3-carboxylic acid;
N-({3-[4-(Pyridin-2-ylamino)butoxy]phenyl}sulfonyl)-L-aspartic acid;
2,2-Difluoro-3-phenyl-3-[({3-[4-(pyridin-2-ylamino)butoxy]-phenyl}sulfonyl)-amino]propanoic acid;
(S) 3-[(3,5-dichloro-2-hydroxyphenyl)-3-(3-methoxyphenylsulfonyl-amino)]propionic acid;
3-Pheny-4-[3-{3-(pyridin-2-yl)amino-1-propyloxy}phenyl]butanoic acid.

3. A pharmaceutical composition comprising a therapeutically effective amount of a compound according to Claim 1 and a pharmaceutically acceptable carrier.

4. A pharmaceutical composition comprising a therapeutically effective amount of a compound according to Claim 2 and a pharmaceutically acceptable carrier.

5. A method for treating conditions mediated by the $\alpha_v\beta_3$ integrin in a mammal in need of such treatment comprising administering an effective $\alpha_v\beta_3$ inhibiting amount of a compound of Claim 1.

6. A method for treating conditions mediated by the $\alpha_v\beta_3$ integrin in a mammal in need of such treatment comprising administering an effective $\alpha_v\beta_3$ inhibiting amount of a compound of Claim 2.

7. The method according to Claim 5 wherein the condition treated is solid tumor growth.

8. The method according to Claim 6 wherein the condition treated is solid tumor growth.

9. The method according to Claim 5 wherein the condition treated is tumor metastasis.

10. The method according to Claim 6 wherein the condition treated is tumor metastasis.

11. The method according to Claim 5 wherein the condition treated is angiogenesis.

12. The method according to Claim 6 wherein the condition treated is angiogenesis.

13. The method according to Claim 5 wherein the condition treated is osteoporosis.

14. The method according to Claim 6 wherein the condition treated is osteoporosis.

15. The method according to Claim 5 wherein the condition treated is humoral hypercalcemia of malignancy.

16. The method according to Claim 6 wherein the condition treated is humoral hypercalcemia of malignancy.

17. The method according to Claim 5 wherein the condition treated is smooth muscle cell migration.

18. The method according to Claim 6 wherein the condition treated is smooth muscle cell migration.

19. The method according to Claim 5 wherein restenosis is inhibited.

20. The method according to Claim 6 wherein restenosis is inhibited.

21. The method according to Claim 5 wherein atherosclerosis is inhibited.

22. The method according to Claim 6 wherein atherosclerosis is inhibited.

23. The method according to Claim 5 wherein macular degeneration is inhibited.

24. The method according to Claim 6 wherein macular degeneration is inhibited.

25. The method according to Claim 5 wherein retinopathy is inhibited.

26. The method according to Claim 6 wherein retinopathy is inhibited.

27. The method according to Claim 5 wherein arthritis is inhibited.

28. The method according to Claim 6 wherein arthritis is inhibited.

29. A method for treating conditions mediated by the $\alpha_v\beta_5$ integrin in a mammal in need of such treatment comprising administering an effective $\alpha_v\beta_5$ inhibiting amount of a compound of Claim 1.

30. A method for treating conditions mediated by the $\alpha_v\beta_5$ integrin in a mammal in need of such treatment comprising administering an effective $\alpha_v\beta_5$ inhibiting amount of a compound of Claim 2.

31. The method according to Claim 29 wherein the condition treated is solid tumor growth.

32. The method according to Claim 30 wherein the condition treated is solid tumor growth.

33. The method according to Claim 29 wherein the condition treated is tumor metastasis.

34. The method according to Claim 30 wherein the condition treated is tumor metastasis.

35. The method according to Claim 29 wherein the condition treated is angiogenesis.

36. The method according to Claim 30 wherein the condition treated is angiogenesis.

37. The method according to Claim 29 wherein the condition treated is osteoporosis.

38. The method according to Claim 30 wherein the condition treated is osteoporosis.

39. The method according to Claim 29 wherein the condition treated is humoral hypercalcemia of malignancy.

40. The method according to Claim 30 wherein the condition treated is humoral hypercalcemia of malignancy.

41. The method according to Claim 29 wherein the condition treated is smooth muscle cell migration.

42. The method according to Claim 30 wherein the condition treated is smooth muscle cell migration.

43. The method according to Claim 29 wherein restenosis is inhibited.

44. The method according to Claim 30 wherein restenosis is inhibited.

45. The method according to Claim 29 wherein atheroscelorosis is inhibited.

46. The method according to Claim 30 wherein atheroscelorosis is inhibited.

47. The method according to Claim 29 wherein macular degeneration is inhibited.

48. The method according to Claim 30 wherein macular degeneration is inhibited.

49. The method according to Claim 29 wherein retinopathy is inhibited.

50. The method according to Claim 30 wherein retinopathy is inhibited.

51. The method according to Claim 29 wherein arthritis is inhibited.

52. The method according to Claim 30 wherein arthritis is inhibited.